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Strategic Concepts for the Air Atomic Age

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The Need for a Reassessment of Air Strategy

The world stands on the threshold of an era of great danger. The US and the USSR will soon possess the air-atomic capability ((Atomic includes both fission and thermonuclear weapons)) to wound civilization gravely. Although the US is currently ahead, both sides will possess this capability to an increasing degree, regardless of practicable defensive measures taken by either side to deflect and blunt a potential attack. This central fact has been known in general terms by responsible officials for some time. However, the enormous complexities of growing US and USSR air-atomic power, obscured by the inadequacy of US intelligence and compounded several fold by sweeping technological advances in weapons and delivery systems, have made most difficult the analysis and solution of this problem. Over the past few months, however, several authoritative analyses of various segments of this problem have been completed. ((? Operation Solarium?)) These analyses highlight several factors of major importance--Soviet Strategic Atomic Sufficiency, US Military Atomic Sufficiency, and Technological Changes in Air Power. These factors taken together with economic considerations, point clearly to the need for a reassessment of military strategy, as the world moves swiftly toward an air-atomic age.

Soviet Strategic Atomic Sufficiency.

The USSR will soon be militarily capable of delivering a heavy atomic attack on the US which could cause billions of dollars worth of damage, result in the loss of millions of US lives, and seriously diminish the ability of the US to support a prolonged major war effort. (ADC analyses estimate total kill probability of air defense system in 1952 to lie between 15% for a high altitude day attack and 0.1% for a low altitude night attack; for 1955, 17-23%, for 1957, about 50%.) Such kill probabilities, when applied against intelligence estimates of the SU atomic bomb production do not indicate any decrease in the number of bombs theoretically arriving on US targets. Even the present estimated stockpile, if accurately placed on US targets, would be a catastrophic blow. ((Kelly Committee). The USAF SAC "Sunday Punch," the principal ingredient of a counter-economy air strategy, has been the most effective deterrent to major acts of aggression on the part of the Soviets. Now, however, the Soviets are approaching a position of symmetry with this vitally important SAC capability. For the Soviets, this will be a period of strategic atomic sufficiency. (((("strategic" = country-economy)))

...US approaching an ~~era~~ of US atomic plenty, i.e. military sufficiency. Our military strategy must therefore be based on a nuclear capability adequate for all offensive tasks, and also for critical defensive operations.

...The day when all our combat aircraft, including high performance fighter types, become bomber strike aircraft possessing devastating firepower is clearly at hand.

Economic Considerations. The challenge of communism, coupled with the neutralization--by airpower--of our historic ocean barriers, has placed unprecedented strains on the American economy, some of them real, some of them perhaps only psychological. We face the prospect of maintaining armed forces-in-being of great magnitude and expense, for an indefinite period of time. The unexpectedly early Soviet atomic explosion in 1949 brought a then-existing military economy drive to an abrupt halt. Then, in 1950, the Korean episode greatly accelerated a laggard US rearmament program.

2.

Consumer prices rose almost 10 percent during the six-months buying spree following Korea. Almost simultaneously, the inefficiencies of hastily-conceived military programs and the wastes inherent in their rapid implementation became apparent. These inefficiencies and wastes became a campaign issue in the last election which brought into office a new Administration, dedicated to setting the limit of our national security effort in terms of balancing the budget. The national security program which was in effect prior to the recent reductions would have used only about 16% of our total national output at its peak, declining in 1955 to somewhat less than 14 percent.

...

Although US consumers are better off in terms of their real standard of living than ever before, and even though business profits have been sufficient to generate an unprecedented level of investment, there is a general conviction that tax rates cannot be safely raised nor deficit financing indefinitely continued without seriously impinging on the traditional American way of life. The resulting pressures to reduce the cost of the defense establishment have become enormous, and the new Administration has strongly indicated that the costs of previous military force programs have been excessive.

In this context, military planners must take the initiative in reducing the cost of defense to reasonable proportions which, in the opinion of the government, can be successfully borne over the long pull. It is not being argued here that military planners should become economists, nor that they should compromise the military requirements of National Security because of economic considerations. It is being argued that maximum military effectiveness at minimum cost must become the military planners' watchword.

The outcome of a war in the air-atomic age will almost surely be decided by forces-in-being rather than through post-D-day mobilization. ...Considerably less than a thousand nuclear weapons will render the Soviet economy impotent, and probably less than that will do the same to the economy of the US. Large scale use of atomic weapons in counter-military operations (two to three thousand) can reduce armies, air forces and their supporting logistic systems to relative insignificance. This number of weapons can be delivered in a very short time. Therefore, in a nuclear war, the combat potential of both sides will ~~decrease~~ decline rapidly following D-Day, and the size of the mobilization base becomes practically irrelevant....The key factor in winning World Wars I and II was the US mobilization base. Therefore, it is difficult to suddenly discard this concept in planning for victory in World War III. The thinking reflected in the Vance Committee Report ("Production Capacity--A Military Reserve," A report to the Director of Defense Mobilization by the Advisory Committee on Production Equipment, Jan 1953: "the best interests of the Nation will be served by substituting, to the greatest extent practicable, additional production facilities for stockpiles of military end items") is not only obsolete but extremely dangerous to the survival of the US.

...the offensive components of the Air Force, strategic and tactical, are extremely vulnerable to Soviet nuclear attack. Drastic measures must be taken for their protection, or the effects of the first Soviet strike on our capability to deliver atomic weapons could be catastrophic. (R-244-S, 1 March 1953; Wohlstetter Study). The tactical air force and SAC wings deployed in the European theater and concentrated on relatively few airfields can be expected to suffer heavy damage in the initial enemy strike. Even SAC wings in the ZI are vulnerable. The concentration of practically all of our SAC force on a relatively few airfields in the ZI, and the storing of all our nuclear weapons in a very small number of well-known sites, increase their vulnerability and reduces the deterrent effect of US offensive airpower.

As for SAC, immediate dispersal programs can and should be undertaken. In addition, maintenance facilities and POL should be provided with underground or adequate "hard-top" storage....

Simultaneously, reliable data on Soviet air-atomic offensive strength must become an intelligence objective of over-riding importance, and we must take the calculated risk of over-flying Soviet territory to obtain such information. ~~There~~ This information is of prime importance in determining the proper balance between US offensive and defensive airpower.

...SAC can be operated for the ZI, using overseas bases for pre- and post-strike staging. ((RAND R-244-S))

US vs USSR in a Counter-Economy War

1. Futility of Trading Mutual Counter-Economy Blows. A future war, with unrestricted use of nuclear weapons in counter-economy strategic bombing campaigns, can only end in something approaching national suicide for both sides. It would be folly to assume that symmetry in counter-economy bombing will not exist during the air-atomic age when the number of bombs required on target can be measured in hundreds. It is of little consequence that we have the nuclear stockpile capability of destroying Russia several times, if Russia simultaneously has the capability to destroy us just once. This she can have with a reasonable investment--an investment she is obviously making. An exchange of blows resulting in millions dead and devastation of a large portion of our industrial and urban complex would endanger our national objective of preserving democratic concepts and institutions. This basic inconsistency between national objectives and unrestrained counter-economy warfare under conditions of US-USSR strategic atomic symmetry demands that we explore objectively every possible war-winning strategy which minimizes the prospects of an automatic exchange of counter-economy nuclear attacks.

There are two very good reasons why the Air Force should concern itself with broader air strategy than that based too rigidly on the decisiveness of the counter-economy campaign. First, with symmetrical US-USSR counter-economy capabilities the "Sunday Punch" is not likely to be decisive. Secondly, the Air Force should not rule out the possibility of a political decision staying the delivery of the "Sunday Punch." Facing up to these possibilities, the Air Force has a challenging opportunity of exploiting fully all elements of air-atomic power to prevent even greater emphasis on the conventional ground-orientation of our strategy.

Any attempts to employ air power in other than the classic strategic role have been too often categorized by the cliché "return the battle to the battlefield." (((Vista? Feb 1952))) On the other hand, the Air Force has correctly bemoaned the fact that the JCS strategy was heavily influenced by World War II thinking even during the period of US atomic monopoly. During this period it was rank heresy to the Air Force--and correctly so--to have the slightest doubt cast upon the validity of the classical tenets of Douhet and Mitchell. Therefore, it is small wonder that the dynamics of the air-atomic age and the significance of the passing of our atomic monopoly have not been fully appreciated and that old concepts of air power continue to be rigidly embraced. Much broader horizons are now open to US air-atomic power and through the exploitation of these horizons lies the hope that counter-economy nuclear war can be avoided.

2. Need for Maintaining Counter-Economy Capability. There can be no guarantee that the USSR will not attack the US economy first. They will undoubtedly have the initiative, and it would be sheer folly either to seek or rely on any agreement with the Russians to refrain from bombing cities. Hence, there will be an over-riding need for a US strategic force with such unquestionable capability that the Soviets will have no room to speculate about the outcome of launching a surprise attack against the US economy. This requires that we maintain a strategic force, relatively invulnerable to ~~the~~ enemy offensive or defensive ~~power~~ airpower. ...They must never be tempted to strike the US economy on the assumption that SAC is highly vulnerable and if

destroyed will eliminate our capability to retaliate. This is the only effective and practical way of standing down SUSAC.

3. Counter-Economy Campaign Indecisive in Era of US-USSR Nuclear Symmetry.

It has been estimated that a counter-economy strategic bombing campaign will have a noticeable effect on well-stocked Soviet forces-in-being only six to twelve months after the outbreak of war. In this event, the counter-economy mission will have a relatively small effect on the Soviet tactical air-ground offensive. If Western Europe is occupied, we will then be faced with the necessity of "liberating" it in the WW II sense of the world. Clearly this would be impossible in the event counter-economy blows are exchanged since there would be no healthy US economy and some millions less people in the US to use in mounting this new expeditionary force. Furthermore, ~~in~~ in the face of an enemy atomic capability, Normandy-type invasions are doomed to failure. Thus, although the US would not necessarily have "lost" the war, we would be in no position to win it militarily. And with Western Europe lost to us, the long term political and economic factors would strongly favor the Soviets. These possibilities point up the indecisive nature of a counter-economy campaign against the Soviets, when they can do the same to us. Clearly we must search for--and prepare for the transition to--an air strategy which provides maximum hope of avoiding the devastation of our cities and the mass loss of life, and which guarantees West European defense and survival.

4. Political Implications of Soviet Nuclear Sufficiency.

When the Soviets have achieved air-atomic sufficiency, their large ground armies and tactical air forces will, in a conventional military sense, shift the world balance of power in favor of the Soviets. With devastating punishment aimed at the US and NATO countries, the Soviets will be in a strong bargaining position to press for agreement to refrain from employing nuclear weapons. Furthermore, having the initiative, the Soviets might refrain from using nuclear weapons and simultaneously announce that city bombing would be resorted to only in retaliation. In the face of a known Soviet nuclear capability, it is highly unlikely that the Allies would, except as a last resort, initiate city bombing.

The possible courses of events outlined above would appear to favor the Soviets, with their large edge in conventional ground armies and tactical air forces. However, the reverse is possible if the US takes full advantage of its larger stockpile for mass employment of nuclear weapons by both tactical and strategic air forces against Soviet military forces-in-being and their direct supporting elements. A large and potentially decisive military advantage accrues to the US in counter-military force operations because of a much larger nuclear stockpile; the probability of a greater variety of proven weapons and delivery systems; and a variety of proven delivery tactics and techniques. These advantages can be maintained for perhaps ten years and, if properly employed, can be militarily decisive. This US counter-force nuclear capability enables us to effectively overcome the Soviet advantage in numbers of conventional ground and tactical air forces. In the light of the above, the US should publicly announce a policy to employ nuclear weapons against military targets in any overt military aggression fomented by the Soviets. Such a policy would provide an added deterrent to general war and, equally important, an entirely new deterrent to peripheral aggressions. Failure to do so may give rise to misguided--and potentially disastrous to us--movements to outlaw the use of nuclear weapons completely.

IV. Counter-force Operations: A Decisive Capability for US Offensive Airpower

...First: A counter-force capability is proposed as a major and war winning role for US offensive airpower instead of, as generally held in the Air Force, a secondary role to the counter-economy mission.

Second: This paper makes no proposals to diminish the importance of the strategic counter-economy capability. To the contrary, such a capability becomes increasingly vital to this Nation's survival. However, this paper does argue that to continue for long a strategy to bomb the Soviet economy immediately at the outbreak of war will not be in the Nation's best interest. When the Soviets approach air-atomic ~~sufficiency~~ strategic sufficiency, US air-atomic military sufficiency supporting a counterforce strategy will become the key to the early achievement of a dominant military position vis-a-vis the Soviets.

Targets for Counter-Force Operations. Combat forces, lines of communication and supporting supplies constitute the principal targets for attack and destruction. The Air Complex: The targets of highest priority among offensive enemy combat forces are those intended for the air delivery of nuclear weapons. ...

The Ground Complex. The destruction of the enemy's air force is the essential prelude to the large-scale attack of his ground forces....

Sub bases. Bridge demolition. POL storage sites.

Very-high-altitude balloons and limited sorties by special aircraft (optimized for high altitude performance) can go far toward meeting pre-D-Day requirements.

Principal Advantages of a Counter-Force Strategy

1. A Counter-force Strategy in an Air-Atomic Age stands in sharp contrast to present World War II influenced strategy, which emphasizes (a) the US mobilization base, and (b) the SAC counter-economy "Sunday Punch"; also to the Fortress America strategy which places heavy emphasis on air defense; and to the completely unrealistic and impractical strategies based on various atomic disarmament proposals.

...The counter-force strategy offers a possibility of limited war and a higher probability of preserving our way of life. The present strategy leaves no choice but total war which almost assuredly will result in mutual suicide. It is thus a contradiction of national policy--and without even the assurance of military victory.

The counter-force strategy clearly distinguishes between Soviet-controlled peoples and the Communist regimes. The US professes no animosity toward Soviet-controlled peoples, although it does hold them at least partially responsible for acts of the regime. Consistent with this, the counter-force strategy does not seek to win the war largely by destroying them.

The "positive" foreign policy of the US Government seeks to reduce the capabilities of the Soviet regime below the danger point, or to alter its intentions through creating situations which represent courses of action more acceptable to the Soviets and more in keeping with our objectives. This also is precisely what the counter-force strategy seeks to do in a military way--reduce Soviet capabilities (military forces and stocks) and create an acceptable alternative course of action for the Soviets (surrender on reasonable, stated terms or perish).

...Any war plan which would unavoidably lead to the annihilation of millions of people would have a brutalizing effect on the nation. To an increasing degree, confusion, despairing fear, and defeatism can be noted in the light of this prospect. The counter-force strategy would seek to avoid hasty and automatic destruction of the Russian and US nations at the first sign of war. Furthermore, armed with the strength to destroy Soviet forces-in-being, the US could negotiate with the Soviets from a position of confidence and moral strength.

The question of whether, when, and how to make our counter-force capability known to the enemy and to the world would have to be carefully studied at the highest levels. Certainly the deterrent value of this capability is greatly enhanced if the enemy knows about it in general terms. Simultaneously, however, this knowledge gives him an immediate advantage in developing countermeasures. Recognizing the enormous complexities of these issues, only one of many possibilities is suggested.

The U.S. might announce the suspension of counter-economy attacks, when we are militarily sure that we can implement the counter-force strategy. U.S. propagandists could exploit fully our nation's achievement of such overwhelming military strength that we can afford to withhold attacks on cities of the world unless our own or those of our allies are first bombed.

5. Opportunity to Wage Peripheral Wars Decisively. Korea has made it manifestly apparent that peripheral wars cannot be waged decisively by the US and its allies under the two political constraints now imposed on this type of military action. To fight a war decisively with World War II weapons, it is necessary to destroy the base of military strength ((?)); but UN military forces in Korea were restrained from doing this because of apprehensions that it might lead to a major war. And for the US to decisively wage a counter-force type of war, atomic weapons are necessary; but US forces in Korea were restrained from using atomic weapons.

It is necessary to remove these constraints, or the US and its allies will be unable to fight peripheral wars decisively. .La.

In the air age, US mobile air-atomic strength can be the equivalent of 19th century British naval power. It would make possible a global Monroe Doctrine, countering Soviet military aggression against the free world, a political possibility. U.S. troops, now stationed in 49 countries of the world, can be withdrawn to a major extent and stationed in this country or in dispersed and lightly manned standby bases around the Soviet periphery. The US can recover from its present awkward position of over-commitment of available surface forces around the world. Local national forces in Europe and Asia can themselves carry out the containment of Soviet power, backed by the shield of US offensive air-atomic power.

((What conclusions should S. draw now from Soviet military atomic sufficiency? Combined with reduced estimates of Soviet Bloc ground forces? (Combined with real arrival, after all, of SU strategic, counter-economy sufficiency; and SU SIOP doctrine)) No mention of missiles; little mention of SU H-bombs; but these would mainly reinforce his arguments. No discussion of collateral damage, or likely SU ripostes; no mention of ~~xxx~~ C&C problems (though discussion of post-attack recon). Under what circumstances would it be worthwhile to shift from tactical atomic limited war to counterforce operations within Soviet ZI? (This distinction is not mentioned).

Overestimate of the speed with which the Soviets would acquire a counter-economy nuclear capability against the US comparable to our own, and underestimate of the speed with which they would acquire a sizeable tactical and counter-economy nuclear capability against Europe (latter actually came first).

Possibility of limited war in Europe, with no operations against SU ZI, is not mentioned (apparently this is what Brodie had in mind). Thus, for Type II Deterrence by threat of counter-economy attack (an "era of atomic monopoly" strategy), S proposed to substitute Type II Deterrence based on Controlled Response: not merely tactical atomic limited war. Prospects of military outcome and collateral damage in latter, with ~~xxxx~~ two-sided possession, not discussed. But did counterforce strategy promise to be effective enough to make it an effective deterrent against moderate provocations?

No mention of importance of protected reserve throughout initial operations, to maintain intrawar deterrence. (Brodie proposed withhold vir. ally all of S.C)